

**T E C H N I C A L B R I E F****A Decision Support Tool for Disposal of Contaminated Building and Water System Materials****Background**

EPA's National Homeland Security Research Center (NHSRC), headquartered in Cincinnati, Ohio, is developing a decision support tool for the disposal of residues from the decontamination of buildings and water systems. Researchers supporting these projects are located at EPA's research centers in Cincinnati, Ohio, and in Research Triangle Park, North Carolina.

Project Objective

The contaminated site restoration process includes making vital decisions related to:

- Treatment or disposal options
- Selection of the appropriate disposal facility
- Packaging and storing residues
- Transporting materials to the disposal site
- Compliance with relevant permits
- Worker safety
- Protection of human health and the environment



The NHSRC is developing a Web-based tool that will assist in this decision making.

NHSRC Disposal Decision Support Tool

The Decision Support Tool and its associated handbook will assist in the disposal of residues from the cleanup of contaminated buildings and water systems by providing information needed for selection of an appropriate disposal facility. This information includes regulatory requirements and facility contact and permit information. The tool contains the ability to quickly estimate quantities and characteristics of residues produced during restoration operations so that cost tradeoffs between decontamination and disposal can be evaluated early in the process of restoring a contaminated facility. This information will then be incorporated into the detailed waste profiles needed to negotiate contracts with disposal facilities and transportation companies. A flexible user account security mechanism allows sharing of disposal scenarios developed while using the tool so that subsequent users who have a similar situation can rapidly generate the information needed to make decisions.

The currently released version of the decision support tool is limited to combustion/incineration as the primary disposal technology and addresses only building decontamination residue (BDR); however, an enhanced version will soon be available for testing. The enhanced version will address residue packaging and storage, transportation, combustion/incineration, landfilling, and treatment of water system cleanup residues as well. The tool's residue quantity estimation module, in its current version,

(more)

is designed for office and school buildings but will be expanded to include theaters, airports, and water systems. Disposal considerations will include hazards associated with combustion, effects on pollution-control equipment, combustion temperatures, and overloading and feed rates. Hyperlinks will allow access to fact sheets for contaminants and decontamination chemicals.

Users and Benefactors of the Decision Support Tool

Users and benefactors of this tool include EPA and other federal agencies, emergency responders, state and local governments, and disposal facility owners and operators.

For more information, visit the NHSRC Web site at www.epa.gov/nhsrc, or login to the tool at <http://www2.ergweb.com/bdrtool/login.asp>.

Technical Contact: Paul Lemieux (919) 541-0962, lemieux.paul@epa.gov

Kathy Nickel (513) 569-7955, nickel.kathy@epa.gov